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Clinical Department of Orthopaedics, Traumatology and Rehabilitation
Department of Rehabilitation and Physiotherapy
Chair of Rehabilitation, Physiotherapy and Balneotherapy
Department of Information Systems in Health Care, Medical University of Lublin

PIOTR MAZURKIEWICZ, MIROSŁAW JABŁOŃSKI, PIOTR MAJCHER, ANNA KRAWCZYŃSKA, MIROSŁAW JAROSZ

Diagnostic accuracy and efficiency of rehabilitation in ambulatory patients of the Social Insurance Agency's disability prevention programme

The development of civilization and scientific progress have advanced the knowledge of diseases, especially of those which result in chronic dysfunction. Disease prevention and promotion of a healthy lifestyle have become an important factor in preventing disability. Despite all the preventive measures, there still occur diseases which eventually become chronic and significantly decrease the quality of life and professional activity of society in general. The fundamental task of therapeutic rehabilitation is a successful improvement in life quality, especially of chronically ill patients.

In 1990, basing on similar examples of successful programmes launched by corresponding institutions in other countries, the Social Insurance Agency (SIA) introduced a piloting programme which has become the basis of the system of therapeutic rehabilitation as part of disability prevention. The legal grounds are provided by the act of October 13, 1998 concerning the system of social insurance, art. 69. As a consequence of favourable assessment of the results of therapeutic rehabilitation as part of disability prevention, the programme was extended in 2001 to include ambulatory rehabilitation of the locomotor system.

The aim of the study was to analyse diagnostic accuracy and assess the efficiency of therapeutic rehabilitation of patients with locomotor system dysfunctions referred for ambulatory physiotherapeutic procedures as part of ambulatory disability prevention programme of the Social Insurance Agency.

MATERIAL AND METHODS

In 2002, as part of a disability prevention programme of the Social Insurance Agency, thirteen twenty-one days' hospital stays were held in the Department of Physiotherapy of the Public Clinical Hospital No 4 in Lublin. The study included a group of 323 patients who were treated by physicians from the Rehabilitation Dept. of the Chair and Clinical Dept. of Orthopaedics, Traumatology and Rehabilitation and by physiotherapists from the Department of Physiotherapy of the Medical University of Lublin, Poland. The patients were grouped according to gender, age and preliminary diagnosis which resulted in referral for the disability prevention programme. We analysed firm diagnoses after completion of treatment, and the kind of treatment applied, which included kinesitherapy, physiotherapy and hydrotherapy. We assessed the outcome of therapeutic rehabilitation, adopting the criterion of resuming the ability to work. The analysis of the clinical material concerned 323 patients (134 women and 189 men) (Fig. 1).

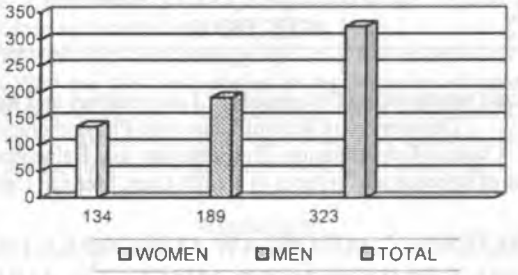

Fig. 1. Patients of the Social Insurance Agency's ambulatory disability prevention programme according to gender

The age group of 41–50 years was the most numerous, comprising 147 patients. The second group, as regards the number, comprising 130 individuals were patients aged 51–60 years. The next group, with 36 patients, was aged 31–40 years. (Fig. 2). The smallest number of patients (10) were in the group aged 21–30 years.

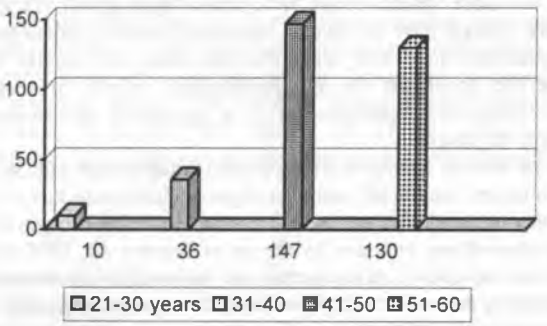

Fig. 2. Patients of the SIA's ambulatory disability prevention programme undergoing therapeutic rehabilitation according to age

In the course of ambulatory therapeutic rehabilitation 11,882 kinesitherapeutic procedures, 15,554 physiotherapeutic procedures and 4,484 hydrotherapeutic procedures were performed. The total number of performed procedures was 31,920.

RESULTS

The treatment carried out in the Department of Physiotherapy of the Public Clinical Hospital No. 4 in Lublin, Poland as part of the Social Insurance Agency's ambulatory disability prevention programme resulted in an improvement of health status and capability to return to work for 140 (43.3%) patients (Fig. 3).

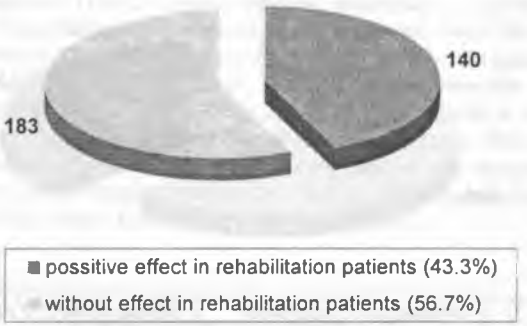

Fig. 3. The outcome of ambulatory treatment within the disability prevention programme of the Social Insurance Agency

The analysis of the obtained results revealed that in 253 cases the principal diagnosis was spinal dysfunction and in 53 patients the problem was the result of trauma to the locomotor system. In 17 cases the diagnoses were spondylopathies and dysfunctions of the locomotor system (Fig. 4).

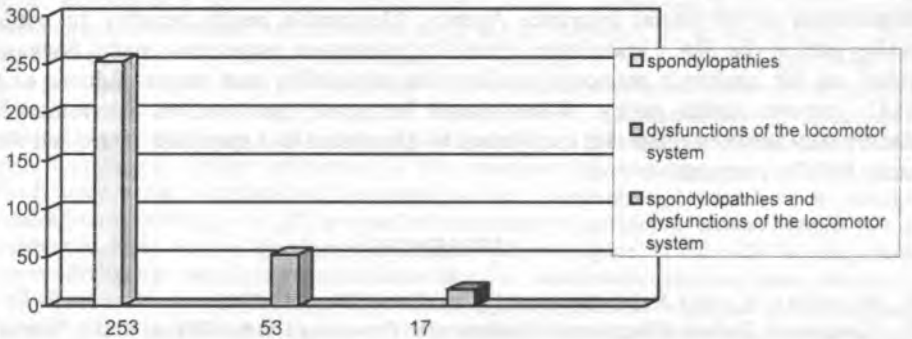

Fig. 4. Diagnoses in patients taking part in the ambulatory disability prevention programme of the SIA

In 202 cases (63.0%), the diagnoses patients had been referred with corresponded with the diagnoses reached in the prevention centre. In 121 cases (37.0%) the diagnoses reached at the end of the hospital stay were different from the ones made by SIA's experts (Fig. 5).

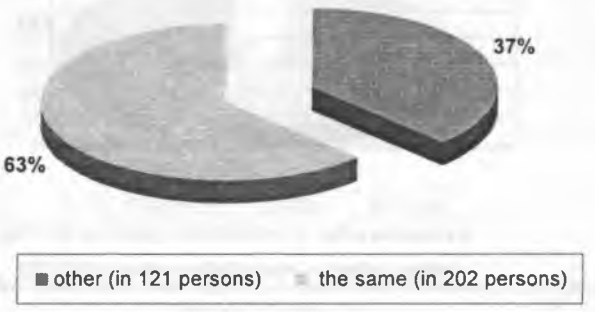

Fig. 5. Diagnoses established by SIA's experts and physicians providing the SIA's disability prevention programme

CONCLUSIONS

An improvement in health status and, consequently, a possibility to return to work was observed in 43.3% of patients after treatment. The obtained result of disability prevention is in accordance with the results of studies conducted by the Statistics Department of the Social Insurance Agency. Measurable health benefits for patients taking part in the SIA's ambulatory disability prevention programme and a favourable effect on the country's economy confirm the advisability and purposefulness of the SIA's present health policy. What should be noted, however, is the remarkable discrepancy between diagnoses established by physicians in a specialist centre and those made by SIA's experts.

REFERENCES

1. K w o l e k A. (ed.): Rehabilitacja medyczna. Tom I. Wrocław 2003.
2. Kwartalnik Zakładu Ubezpieczeń Społecznych. Prewencja i Rehabilitacja, 1 (3), Warszawa 2004.
3. Kwartalnik Zakładu Ubezpieczeń Społecznych. Prewencja i Rehabilitacja, 2 (4), Warszawa 2004.
4. Kwartalnik Zakładu Ubezpieczeń Społecznych. Prewencja i Rehabilitacja, 3 (5), Warszawa 2004.

SUMMARY

The aim of this study was to analyze the primary diagnosis of the patients with disorders of the locomotive organs during prevention sessions organized by the Social Insurance Agency. In 2002 through 13 sections 323 patients were examined and treated by doctors from the Orthopaedics and Rehabilitation Department and by the physiotherapeutic team from Public Clinical Hospital No 4 in Lublin. The patients were divided according to: gender, age, primary diagnosis and final effect after the treatment. The final effect of the treatment was regarded in terms of possible chance to return to work. The analyses of the results shows that the most common diagnosis was the diseases of the spine column (253 patients). The other was injury of

locomotive organs and diseases of spine columne alone or with injuries of locomotive organs. During the whole treatment 11,882 kinesitherapeutic procedures, 15,554 physiotherapeutic procedures and 4,484 hydrotherapeutic procedures were carried out. The total number of performed procedures was 31,920. In 202 patients final diagnoses were the same as in the primary ones. In 121 patients the diagnoses were different. The difference between the number of primary and final diagnoses seems to be important. Those results are comparable to the national results measured by the Statistics Department of the Social Insurance Agency. They confirm medical benefits in the treated patients, which has an impact of the economic system of the country. The final results are the effect of the complex treatment by the team of the Rehabilitation Dept. and the Dept. of Physiotherapy of the Public Clinical Hospital No 4 in Lublin.

Trafność rozpoznań i skuteczność usprawniania u pacjentów leczonych ambulatoryjnie w ramach prewencji rentowej ZUS

Celem pracy była analiza trafności rozpoznań i ocena prowadzonego leczenia usprawniającego pacjentów z dysfunkcją narządu ruchu, skierowanych na ambulatoryjne zabiegi fizjoterapii w ramach prewencji rentowej ZUS. Lekarze i fizjoterapeuci Oddziału Rehabilitacji Katedry i Kliniki Ortopedii, Traumatologii i Rehabilitacji oraz Zakładu Fizjoterapii Samodzielnego Publicznego Szpitala Klinicznego Nr 4 w Lublinie w roku 2002 w ramach prewencji rentowej ZUS podczas 13 turnusów przeprowadzili badanie oraz leczenie 323 pacjentów. Wynik leczenia usprawniającego, czyli rokowanie powrotu do pracy, odniesiono do płci, wieku, rozpoznania wstępnego, tj. ze skierowania na prewencję rentową ZUS i rozpoznania końcowego po zakończonym leczeniu oraz skuteczności zastosowanego leczenia, wykorzystującego kinezyterapię, fizykoterapię i hydroterapię. Analiza otrzymanych danych wykazała, że w rozpoznaniach zasadniczych dominowały dysfunkcje kręgosłupa (253 pacjentów). Pozostałe przypadki dotyczyły innych patologii narządu ruchu (53 pacjentów). Równocześnie stwierdzone choroby kręgosłupa i dysfunkcje narządu ruchu wystąpiły w grupie 17 pacjentów. W trakcie ambulatoryjnego leczenia usprawniającego wykonano 11882 zabiegi kinezyterapii, 15554 zabiegi fizykoterapii i 4484 zabiegi hydroterapii. Ogółem wykonano 31 920 zabiegów fizjoterapeutycznych. W 202 przypadkach rozpoznania, z którymi byli kierowani pacjenci, pokrywały się z ustalanymi w ośrodku prowadzącym prewencję, a w 121 przypadkach rozpoznanie ostateczne istotnie różniło się od postawionego przez lekarza kierującego na leczenie usprawniające. U 140 (43,3%) pacjentów przeprowadzone usprawniające leczenie ambulatoryjne skutkowało poprawą stanu zdrowia i umożliwiło powrót do pracy. Otrzymany przez nas wynik badania w ramach ambulatoryjnej prewencji rentowej ZUS jest zgodny z badaniami przeprowadzonymi przez Departament Statystyki Zakładu Ubezpieczeń Społecznych i wskazuje na powstanie wymiernych korzyści społeczno- ekonomicznych.